

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/EP 03/50961

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01H13/70

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 362 911 A (GROSS JACK R ET AL) 7 December 1982 (1982-12-07)	1-4,6,7, 12,14
Y	the whole document	9
X	DATABASE WPI Section EI, Week 198907 Derwent Publications Ltd., London, GB; Class T04, AN 1989-052887 XP002239792 & SU 1 415 258 A (MOROZ I V), 7 August 1988 (1988-08-07)	1,2,5,8, 11,15
Y	abstract; figure	10,13
Y	US 4 268 815 A (CHRISTIANSEN M TYRONE ET AL) 19 May 1981 (1981-05-19) column 3, line 45 -column 4, line 13; figure 2	9,10
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- *&* document member of the same patent family

Date of the actual completion of the international search

1 April 2004

Date of mailing of the international search report

13/04/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 679 030 A (VOLNAK WILLIAM M) 7 July 1987 (1987-07-07) column 4, line 66 -column 5, line 19; figure 6 ---	13
X	GB 2 133 216 A (NIPPON MEKTRON KK) 18 July 1984 (1984-07-18) the whole document ---	1,6,7,11
A	US 4 517 421 A (MARGOLIN GEORGE D) 14 May 1985 (1985-05-14) the whole document ---	1
A	WO 81 00787 A (MARSHALL E DESIGN INT LTD ;MARSHALL E (GB)) 19 March 1981 (1981-03-19) the whole document ---	1
A	US 4 348 557 A (SADO RYOICHI) 7 September 1982 (1982-09-07) column 4, line 56 -column 5, line 4; figure 1A ---	1
A	US 4 520 248 A (WOELFEL ROBERT) 28 May 1985 (1985-05-28) the whole document -----	1